Lesson 8 – Situation Assessment and Map Images

Estimated time to complete: 30 minutes

In this lesson, you will work from the **Incidents** tab and explore the Situation Map to:

- View values in the fire area.
- View feature information.
- Draw a planning area.
- Capture a map image.
- Upload an image.

The Situation Map

The Situation map is available from the **Incidents** tab and is the primary map used when creating, editing, and updating a decision document. The Analysis map is a comparable map display and it is available from the Analysis tab. Both maps allow users to assess the situation for a selected incident throughout the duration of the incident.

The Situation Map page displays a map with the incident in the center, and three tabs in the left pane: Menu, Map, and Info.

- The **Menu** tab allows access to a full range of incident-related menu options. If you click on a menu option, a Return button is available for you to return to the Situation map (and WFDSS remembers which map layers you were viewing).
- The **Map** tab allows access to the various map layers you've enabled for viewing in your system preferences (Lesson 6).
- The **Info** tab allows you to capture a map image for use in a decision document and view:
    - Specific information about a point or feature on the map ,
    - A fire danger rating graph from the reporting weather station closest to the incident or point you select on the map.
    - A smoke dispersion forecast for the incident or point you select on the map.
    - Strategic objectives applicable to a point you select on the map and the area around it based on the radius value you've chosen.
    - A current fire weather planning forecast for the incident or point you select on the map.
    - LANDFIRE data for a point on the landscape.

Viewing Values in the Fire Area

From the Situation Map and the **Map** tab, you can view the map layers to get an idea of what types of critical values are located in the area of the fire. You customized your map displays in <u>Lesson 6</u> and determined which map layers are available for viewing. Visit that lesson for help with setting your system preferences or proceed with following exercise.

To view values the fire area:

1. Navigate to the Situation Map and the **Map** tab for your training incident.
2. Open the **Incident** > **Fire Perimeter** layers by selecting the ⊞ before each of them. Select the checkbox before the perimeter you drew in Lesson 7.
3. Open the **Fire-Related** map layers to determine if there is record of historical fires in the area. What year did they occur? Are there RAWS stations nearby?
4. Open the **Boundaries** map layers. Which FMUs are affected and from how many different agencies or units? (Because of spatial limitations, you can view all the FMUs or individual FMUS for a unit but you can't view more than one unit at a time.)
5. Open the **Designated Areas** map layers. Are there any designated Wilderness areas in the area of your training incident? What about National Scenic Trails or Byways?
6. Open the **Infrastructure** map layers. What types of buildings are located in the area of the fire?
7. Open the **Natural and Cultural Resources** Map Layers. Is your training incident located in a Class I airshed? Does the area contain critical habitat?
8. Open the Unit Shapes map layers. Does the unit you've chosen to work with have unit shapes loaded?
9. Practice using the scale bar, navigation arrows and Pan Tool. You can also use the following quick zoom method: Hold the shift key down, place the curser where you want to start, and then left click and drag the pointer diagonally to where you want to zoom. Release the left click key to zoom to your framed area.

Viewing Feature Information

You can glean specific information about a feature by using the **Feature information** option on the **Info** tab. For example, if you are viewing NPS buildings in the vicinity of a fire, you can determine what types of buildings they are, their construction type, cost to replace, etc. These facts help you better understand what types of values are at risk. With this tool, you can also query additional values layers that may intersect your point of interest.

To view feature information:

1. From any map, click (Identify tool.)
2. Select a Layers feature (such as a NPS building, for example).
3. From the left pane, choose the **Info** tab, and then click **Feature Information**. A pop-up window appears that shows specifics for the selected feature.
4. If the feature contains a Copy or Download icon, you can copy the selected feature and save it as an incident or analysis shape or download the feature as a zipped shapefile.

Drawing a Planning Area

Now that you've viewed the fire area and the values it contains, you need to create a planning area.

A planning area is a polygon that you draw in a WFDSS map display that helps you to establish an area of interest around an incident and contains all land the fire might burn. A planning area includes all the area used for analysis and planning to manage the fire. It determines which FMUS are contained or partially contained by the planning area, and subsequently, which pre-loaded strategic objectives and management requirements will need to be addressed when developing incident objectives and requirements. Planning areas need to be large enough to include the following:

- Where actions are planned (e.g., firelines, evacuation points, protection points)
- Contingency plans
- Fire behavior modeling outputs
- Where you want to contain the fire
- The physical reality of where the fire could burn during the life of the current decision (even if you don't want it to burn there)

Planning areas are required for documenting a decision and are different from a WFSA boundary or WFIP Maximum Manageable Area. By limiting the planning area to just where you think a fire might go, you are limiting the decision support capability of the application.

Drawing a large planning area may incorporate more FMUs, which in turn may require you to address more strategic objectives, management requirements, and values at risk, but if your planning area is too small, you will have to create a new decision each time management actions occur outside of the existing planning area. It's helpful to use an FSPro probability output as a general guide when trying to determine an appropriate planning area size.

No ramifications result from drawing a large planning area, and it is helpful to use an FSPro probability output to inform you of where the fire may try to move. If you are currently planning Management Action Points or contingency plans outside of your planning area, you are planning outside of your planning area. Your planning area should be larger to include those areas.

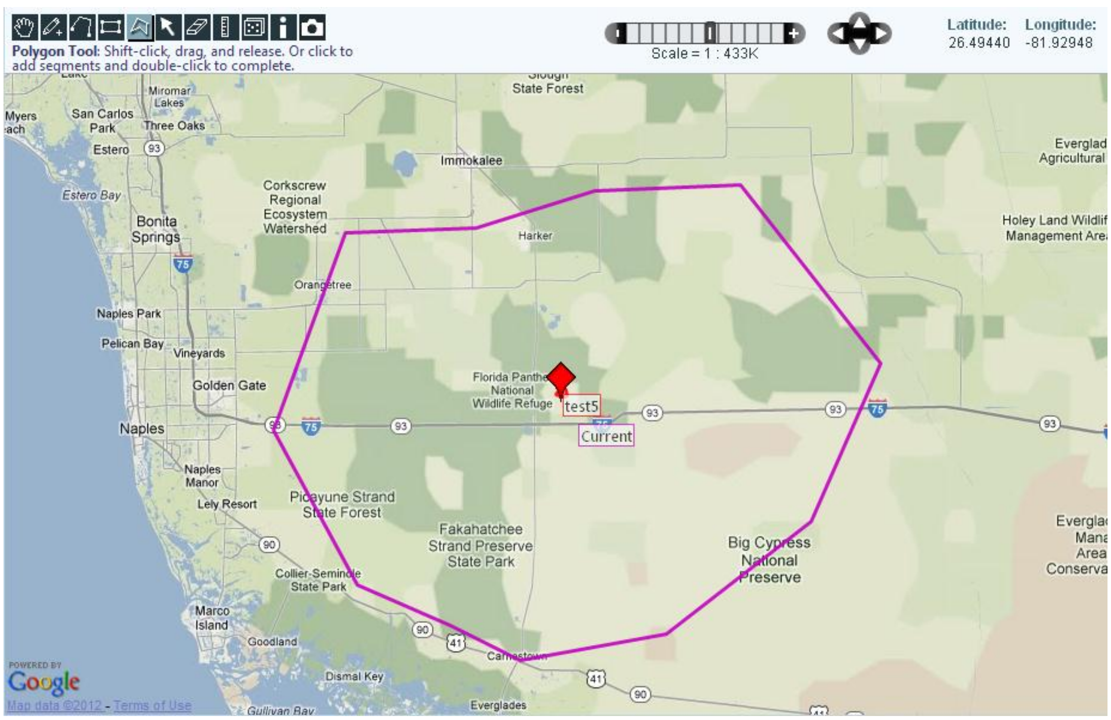
To draw a planning area for your training incident:

1. From the left pane of the Situation map, choose the **Map** tab. The Map Layers are displayed.
2. Zoom out to 1:433K or more.
3. Open the Base Layers and view each of the options. Note that WFDSS Topos is available only at finer resolutions. Select a base layer that gives you a good perspective at larger scales.
4. Display the map layers that you determined to be applicable to your training incident. They helps guide the creation of your planning area.

5. Select the polygon drawing tool and draw a planning area. You can use the rectangle drawing tool if you choose, but typically, a rectangle doesn't effectively capture values and is less precise. If you don't like your finished product, click (Erase Tool) and try again.
6. When you are satisfied with what you've drawn, click beside **Planning Areas** (near top of Map Layers list).
7. Click **Save**.

   If the save was successful, your yellow rectangle becomes a purple outline (as in the image below).

8. Keep the current display; we'll pick up here in the next exercise.



About Images

Images can be captured or uploaded for use in an incident's decision document by WFDSS users with the following roles or privileges:

- Incident owners and editors,
- Fire Behavior Specialists and Super Analysts,
- Dispatchers (must be in the same geographic area as the incident), and
- Geographic Area Editors (must be in the same geographic area as the incident).

Since the incident content can only be viewed by an incident owner or editor when editing a pending decision, captured and uploaded images can only be accessed and/or reviewed after a decision is created (but before it is published).

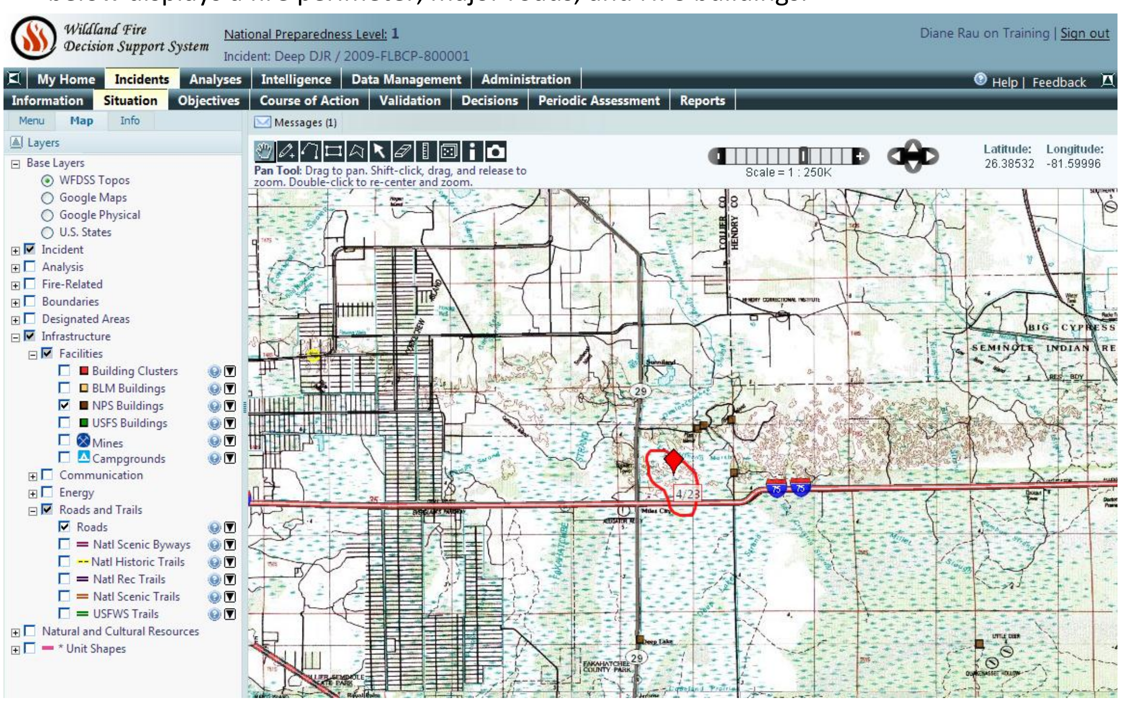
Capturing Map Images

From the Situation and Analysis maps, you can capture map displays in a snapshot photo that can be added to your decision document. Map displays that show fire perimeters, M.A.P.s, critical values, and fire behavior outputs are a few examples of images that are helpful to capture and help describe the complexities of an incident. The only caveat is that you can only capture map images that use WFDSS topos as a base layer. WFDSS topos are the only base layer that can be copied or reproduced in WFDSS due to copyright issues.

Capturing images requires two inputs: Image Label and Description. When developing Image Labels and Descriptions, special characters can't be used; WFDSS will warn you that special characters need to be removed before the application can successfully capture an image.

To capture an image for your training incident:

1. If you are using Google Physical as a base layer, change it to WFDSS topos. Remember, WFDSS topos can only be viewed at larger scales so you may have to adjust the map scale. Using the scale bar, zoom in until you can view the base layer (try 1:250K or 1:175K).
2. Create a map display relevant to your training incident. For example, display critical values near the fire perimeter, or land ownership in the area of the fire. The example below displays a fire perimeter, major roads, and NPS buildings.



3. You can capture your image in one of two ways:

   a. Select the **Info** tab. On the left hand bottom of the screen, you'll see the Map Capture section. Click beside it, and you see two fields, **Image Label**, and **Description.**
   b. Click **(Camera tool.)** The Map Capture section opens in the pane on the left, and you see two fields, **Image Label** and **Description**.

4. Create an **Image Label**. Use the Image Label to locate the image in the incident content. It is also displayed above the image when you add it to your decision document. The above example could be named *"0423 perim and values."*
5. Create a **Description** for your image.

   The description should include why the image is important and why it's relevant to the decision document it will be added to. It displays below the Image Label. A Description for the above example could be *"Image displays 0423 perimeter and nearby values that include NPS buildings to the north and east and a major interstate south of the fire."*

6. Select **Capture Image.** A message appears atop the map that says something similar to *"Sent map capture request for 0423 perim and values".* You will not be able to view the image until we create a decision in a later lesson.
7. Return to the **Map** tab in the left pane and create a few more images to capture. These images will be added to your decision document in a later lesson.

Uploading Images

Often, decision documents require images and other data that are not created in WFDSS. The following examples are types of images you may want to upload to support a decision:

- Maps of nearby fuels treatments
- Photos of fuels or fire behavior
- Spot weather forecasts
- Miscellaneous documents

Uploading images requires more inputs than capturing images. In addition to Image Label and Description, you need to select an Image Type and browse to where the image is located. Special Characters cannot be used when creating Image Labels and Descriptions; WFDSS warns you that special characters need to be removed before the application can successfully capture an image.

You can upload the following file types:

- .JPG
- .GIF
- .PNG

You cannot load .BMP, .TIFF, or .PDF images at this time.

You will upload an image(s) for your training incident in this next exercise. Using the examples above as a guide, locate some images that you can upload. Any fire-related image will do, as the goal is for you to learn how to do it. You will add the images from the incident content tree to your decision document in a later lesson.

To upload an image for your training incident:

1. From the Situation map, select the **Menu** tab, and then select **Image Upload** from the list on the left.
2. Create an **Image Label**. You'll use the Image Label to locate the image in the incident content. It will also be displayed above the image when you add it to your decision document.
3. Create a **Description** for your image. The description should describe why the image is important and why it's relevant to the decision document it will be added to. It will display below the Image Label.
4. Select the **Image Type** from the drop-down menu.
5. Click **Browse**, and then navigate to the image file on your computer.
6. Select **Open**, and then select **Upload**.

   It may take a few moments, but look for a message in green atop the page that says the file was uploaded successfully. You will not be able to view the image until we create a decision in a later lesson.

7. Upload a few more images if you like, following the steps above. The more images you upload now, the more opportunity to practice using the decision editor you will have in later lessons.

Search for these related topics in the Help

- About Maps
- Copying Feature Information
- Situation Map
- Viewing Feature Information
- Creating a Planning Area
- Capturing Map Images
- Uploading Images
- Incident Content Tree